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(54) **Method and apparatus for centralized processing of oilfield or waterfield engineering data for design and analysis from distributed locations**

(57) A technique for centralized processing of oilfield or waterfield engineering data for design and analysis from distributed locations is disclosed. In one aspect, the invention includes a method comprising: acquiring a plurality of oilfield or waterfield data; establishing a communications link between a client computing device to a server computing device; inputting data from the client computing device to the server computing device; processing the data at the server computing device; and communicating the results to the client com-

puting device. In a second aspect, the invention includes a computing system, comprising: a client computing device; a server computing device interconnected with the client computing device; and an analysis tool resident on the server. The analysis tool includes a calculation engine capable of analyzing the data entered from the client computing device; and a plurality of program utilities for use by the calculation engine in analyzing the data.

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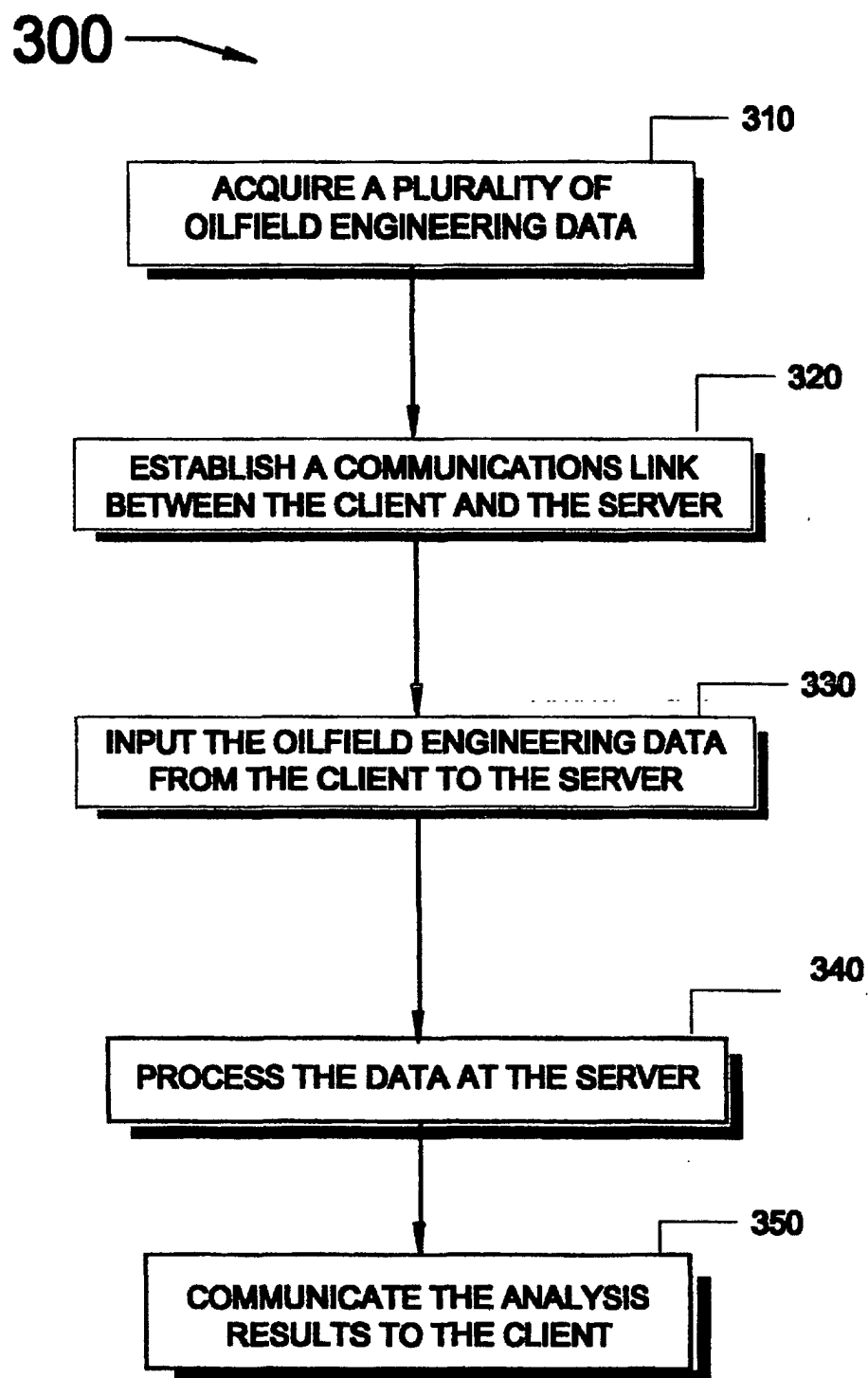


FIG.3



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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	WO 00/37770 A (BAKER HUGHES INC) 29 June 2000 (2000-06-29) * abstract; figure 1 * * page 4, line 15 - page 8, line 17 * ---	1-39	G01V11/00 G01V1/22
X	US 5 959 547 A (TUBEL PAULO ET AL) 28 September 1999 (1999-09-28) * column 5, line 66 - column 6, line 47 * ---	1-5, 7-11, 13-16, 18-23, 25-30, 32-37,39	
X	MCGINLEY P J: "Leveraging off advances in internet technology to bring data to the expert user on-shore" SPE ANNUAL TECHNICAL CONFERENCE AND EXHIBITION, XX, XX, vol. 2 (P1), 1999, pages 219-225, XP002160868 * the whole document * ---	1-5, 7-11, 13-16, 18-23, 25-30, 32-37,39	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
X	EP 1 004 900 A (INPUT OUTPUT INC) 31 May 2000 (2000-05-31) * column 3, line 41 - column 4, line 7; figure 1 * ---	1-5, 7-11, 13-16, 18-23, 25-30, 32-37,39	G01V
A	US 6 012 016 A (BILDEN DEAN ET AL) 4 January 2000 (2000-01-04) * abstract * --- -/--	1-39	
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 16 April 2004	Examiner Thomas, J
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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Application Number
EP 01 40 2393

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	US 5 345 586 A (HAMALA ANNETTE M ET AL) 6 September 1994 (1994-09-06) * column 3, line 20 - column 4, line 53; figure 1 * -----	1-39	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
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16-04-2004

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0037770	A	29-06-2000	AU 2201800 A	12-07-2000
			BR 9916388 A	06-11-2001
			CA 2353900 A1	29-06-2000
			DK 200100934 A	13-08-2001
			GB 2361730 A ,B	31-10-2001
			NO 20013032 A	19-06-2001
			WO 0037770 A1	29-06-2000
US 5959547	A	28-09-1999	US 6006832 A	28-12-1999
			US 5662165 A	02-09-1997
			US 5730219 A	24-03-1998
			US 5597042 A	28-01-1997
			AU 730715 B2	15-03-2001
			AU 4902297 A	05-05-1998
			CA 2268104 A1	16-04-1998
			GB 2354822 A ,B	04-04-2001
			GB 2354583 A ,B	28-03-2001
			GB 2334104 A ,B	11-08-1999
			NO 991667 A	27-05-1999
			WO 9815850 A1	16-04-1998
			US 6209640 B1	03-04-2001
			US 6302204 B1	16-10-2001
			US 6253848 B1	03-07-2001
			US 6065538 A	23-05-2000
			AU 719755 B2	18-05-2000
			AU 4923896 A	27-08-1996
			AU 6558896 A	13-03-1997
			CA 2185067 A1	12-03-1997
			CA 2187432 A1	15-08-1996
			GB 2305196 A	02-04-1997
			GB 2302113 A ,B	08-01-1997
			NO 960519 A	12-08-1996
			NO 963798 A	12-03-1997
			WO 9624748 A1	15-08-1996
			US 5839508 A	24-11-1998
			AU 3760597 A	26-03-1998
			CA 2215628 A1	23-03-1998
			GB 2317406 A ,B	25-03-1998
			NO 974372 A	24-03-1998
EP 1004900	A	31-05-2000	US 6041283 A	21-03-2000
			CA 2281855 A1	11-03-2000
			EP 1004900 A2	31-05-2000
			JP 2000147131 A	26-05-2000
			NO 994424 A	13-03-2000

EPO FORM P0459

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 40 2393

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The members are as contained in the European Patent Office EDP file on
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16-04-2004

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6012016	A	04-01-2000	NONE	

US 5345586	A	06-09-1994	JP 2571660 B2	16-01-1997
			JP 6110756 A	22-04-1994

EPO FORM P0419

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82